UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/681,243	10/09/2003	David Andrew Thomas	100202723	6578

22879 7590 11/16/2007
HEWLETT PACKARD COMPANY
P O BOX 272400, 3404 E. HARMONY ROAD
INTELLECTUAL PROPERTY ADMINISTRATION
FORT COLLINS, CO 80527-2400

EXAMINER	
CLOUD, JOIYA M	

ART UNIT	PAPER NUMBER
2144	

MAIL DATE	DELIVERY MODE
11/16/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/681,243	Applicant(s) THOMAS, DAVID ANDREW	
	Examiner Joiya M. Cloud	Art Unit 2144	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 August 2007*.
2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-22* is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) *1-22* is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a)☐ All b)☐ Some * c)☐ None of:
1.☐ Certified copies of the priority documents have been received.
2.☐ Certified copies of the priority documents have been received in Application No. _____.
3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This action is responsive to communications 09/10/2007. Claims 1-22 are presented for examination. No claims have been amended.

Applicant's arguments and amendments filed 09/10/2007 have been carefully considered but they are not deemed fully persuasive.

2.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. **Claims 1-22** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Hensbergen (U.S. Patent No. 7,000,027, hereinafter Hens)** in view of **Beck (U.S. Patent No. 6,665,304).**

As per claim 1, Hens discloses the invention substantially as claimed.

Hens teaches a method for querying information from a switch by a first server of plural servers **(nodes)** in a computer network **(col. 2, lines 57-67)** comprising extracting, by the first server, connection information from an information packet transmitted to the first server **(col. 10, lines 18-22, where Hens teaches**; determining, by the first server, whether the first server is handling a connection associated with the information packet **(Figure 6, item 630 and 640, where a determination is made as to whether the server (node) is to handle the request or pass the request to another node)**; constructing, by the first server, a query information packet **(a packet requesting a handoff of the connection from node A to node B, col. 7, lines 35-37)** when the first server determines that the first server is not handling the connection associated with the information packet **(col. 10, lines 29-39, col. 10, lines 20-25)**, wherein the query information packet includes query information for a switch; forwarding, by the first server, the query information packet to the switch **(col. 10, lines 29-39, col. 3, lines 9-19, col. 10, lines 15-39, where the query information packet is taught by Hens who sends a forwarded packet including client's request, requesting a new connection information to redirect packets to node B, col. 4, lines 20-43)**; constructing, by the switch, a response information packet **(col. 7, lines 23-54, where Hens teaches a FIN packet sent from the switch to the first server, node A)**; and forwarding, by the switch, the response information packet to the first server **(col. 7, lines 40-42, the switch sends FIN packet to the first server, node A)**.

However, Hens does not ***explicitly*** teach wherein the response information packet includes a secondary network address of a server that is handling the connection associated with the information packet **(Although Hens does teach the updating of network address mapping tables which ultimately produces a new, secondary network address that allows forwarding client request to the second server, node B)**;

Beck teaches explicitly the response information packet includes a secondary network address of a server that is handling the connection associated with the information packet **(col. 6, lines 1-17)**.

Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Hens's teachings to the teachings of Beck, for the purpose of redirecting information to a selected node over a network **(col. 2 43-49).** Furthermore, the combination of Hens-Beck provide an additional means to specify "the processor node…to which the data packet should be directed," by including a secondary network address to identify the intended destination of a packet **(col. 4, 34-38).**

As per claim 2, Hens-Beck teaches a method comprising the step of forwarding the information packet to the first server from the switch **(Hens: col. 7, lines 40-42)**.

As per claim 3, Hens-Beck teaches a method wherein the first server modifies a header of the query information packet to include the query information for the switch **(col. 7, lines 55-67 where payload header manipulation processing takes place)**.

As per claim 4, Hens-Beck teach a method wherein the query information is included in a payload of the query information packet **(Hens: col. 7, lines 55-67)**.

As per claim 5, Hens-Beck teach a method wherein the query information requests from the switch an address of a server of the plurality of servers that is handling the connection associated with the information packet **(Hens: col. 10, lines 29-39, col. 3, lines 9-19, col. 10, lines 15-39, where the query information packet is taught by Hens who sends a forwarded packet including client's request, requesting a new connection information to redirect packets to node B, col. 4, lines 20-43 and Beck: col. 6, lines 1-17)**.

As per claim 6, Hens-Beck teach a method wherein the switch searches connection information to determine the secondary network address of the server that is handling the connection associated with the information packet **(Hens: col. 4, lines 1-19)**.

As per claim 7, Hens-Beck teaches a method wherein the response information packet includes the secondary network address in an ethernet source address field of a header of the response information packet **(Beck: col. 6, lines 1-17 and col. 10, lines 63-67)**.

As per claim 8, Hens-Beck teaches a method wherein the response information packet includes the query information from the query information packet **(Hens: col. 10, lines 29-39, col. 3, lines 9-19, col. 10, lines 15-39)**.

As per claim 9, Hens-Beck teaches a method comprising the step of extracting, by the first server, the secondary network address from the response information packet; and forwarding the information packet to the secondary network address of the server of the plurality of servers that is handling the connection associated with the information packet **(Hens: col. 3, lines 9-19 and Beck: col. 6, lines 12-17)**.

As per claims 10 and 11, Hens-Beck teaches a method wherein the information packet is a transmission control protocol (TCP) protocol data unit (PDU) and wherein the information packet is a user datagram protocol (UDP) protocol data unit (PDU) **(Hens: Abstract and col. 10, lines 4-7)**.

As per claims 12-22, claims 12-22 are substantially the same as claims 1-11, but in system rather than method form. Therefore, the rejection for claims 1-11 applies equally as well to claims 12-22.

Response to Arguments

3.

On pages 2-6, Applicants arguments appear to be addressing the references, Hensenberg and Beck separately (e.g. paragraphs 2-3 on page 4). In response to applicant's argument, Examiner submits that the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

A) Hensenberg fails to teach or suggest "a query information packet include[ing] query information for a switch."

As to the above point A), Examiner respectfully submits that this particular limitation is broadly claimed without providing any limiting effect on what specifically is definitive of "query information for a switch." In particular, Examiner has interpreted such query information for a switch to include the information designating the forwarding destination of the information sent in the query packet (handoff request) to the switch. Hensenberg specifically teaches a handoff request sent to the switch in which case the query also includes the query information that determines the destination node in which the switch will splice the connection to. See col. 10, lines 29-39, where Hensenberg teaches "A handoff request is sent to the switch requesting that the connection be spliced to the other node." Examiner suggests Applicant substantially narrow the above broad limitation to explicitly define what Applicant regards as the claimed invention.

B) "Beck says nothing with regard to a "response information packet."

As to the above point B), Examiner submits that a "response information packet" can be reasonably interpreted as a packet including response information. Beck specifically discloses a reply data packet which contains acknowledgment information to the received data. A destination address is added to the packet data to be delivered to the destination node.

C) "there would have been no motivation for one of ordinary skill in the art to combine Hensbergen and Beck.

In response to applicant's argument C), Examiner submits that motivation is only required to be established from the perspective of a person of ordinary skill in the art and not necessarily from the references themselves. Applicant has not established that a person of ordinary skill in the art would not have been motivated to modify Hensbergen to Beck in order to arrive at the invention as claimed.

CONCLUSION

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joiya Cloud whose telephone number is 571-270-1146. The examiner can normally be reached Monday to Friday from on 7:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Vaughn can be reached on 571-272-3922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-3922. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JMC

William C. Vaughn

Supervisory Patent Examiner

November 13, 2007

WILLIAM VAUGHN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100